

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

06/30/2003

MORGAN & FINNEGAN 345 PARK AVENUE NEW YORK, NY 10154 CHOOBIN, BARRY

ART UNIT CLASS-SUBCLASS

382-132000

DATE MAILED: 06/30/2003

_		/			
	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	09/287,406	04/06/1999	HIROYUKI SHINBATA	1232-4532	6272

TITLE OF INVENTION: IMAGE PROCESSING METHOD APPARATUS AND STORAGE MEDIUM FOR RECOGNITION OF IRRADIATION AREA

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	09/30/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents Alexandria, Virginia 22313-1450

				U3)746-4UU		
INSTRUCTIONS: This for appropriate. All further corindicated unless corrected I maintenance fee notification	delow or directed otherw	transmitting the ISSUE F he Patent, advance orders vise in Block 1, by (a) sp	EE and PUBLICAT and notification of ecifying a new corre	TON FEE (if maintenance f spondence ad	required). Blocks 1 through 4 ees will be mailed to the curren dress; and/or (b) indicating a ser	should be completed when t correspondence address a parate "FEE ADDRESS" for
CURRENT CORRESPONDENCE		rk-up with any corrections or use b	F a	ee(s) Transm	ate of mailing can only be used fattal. This certificate cannot papers. Each additional paper,	be used for any other such as an assignment or
MORGAN & FIN	NNEGAN		f	ormal drawing	, must have its own certificate of	mailing or transmission.
345 PARK AVENUE NEW YORK, NY 10154			I L	hereby certif Inited States P nvelope addre	Certificate of Mailing or Tran y that this Fee(s) Transmittal is ostal Service with sufficient posts ssed to the Box Issue Fee addres the USPTO, on the date indicated	s being deposited with the age for first class mail in an is above, or being facsimile
			<u> </u>	ansimited to t	ne OSI TO, on the date indicated	(Depositor's name
			i i			(Signature
						(Date
APPLICATION NO.	FILING DATE	FIRS	ST NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/287,406	04/06/1999	HIE	ROYUKI SHINBAT.	A	1232-4532	6272
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICA	TION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300		0	\$1300	09/30/2003
-			T	· .		
EXAMI	NER	ART UNIT	CLASS-SUBCLAS	SS		
CHOOBIN,	BARRY	2625	382-132000			
1. Change of correspondent CFR 1.363). U Change of corresponds Address form PTO/SB/1. U "Fee Address" indicati	ence address (or Change 22) attached.	of Correspondence	2. For printing on the names of up t or agents OR, alt single firm (havin attorney or agent	o 3 registered ernatively, (2) ng as a mem) and the nar	patent attorneys) the name of a ber a registered mes of up to 2	· · · · · · · · · · · · · · · · · · ·
PTO/SB/47; Rev 03-02 (Number is required.	or more recent) attached.	Use of a Customer	registered patent attorneys or agents. If no name is listed, no name will be printed.			
3. ASSIGNEE NAME AND	RESIDENCE DATA T	O BE PRINTED ON THE	PATENT (print or t	ype)		
PLEASE NOTE: Unless a been previously submitted (A) NAME OF ASSIGNE			rill appear on the pate cover. Completion of ESIDENCE: (CITY a		of assignee data is only appropria NOT a substitute for filing an assi COUNTRY)	ite when an assignment has ignment.
Please check the appropriate	e assignee category or cat	egories (will not be printe	d on the patent)	⊔ individual	La corporation or other private	group entity 🚨 governmen
4a. The following fee(s) are	enclosed:	4b. Pay	yment of Fee(s):			
☐ Issue Fee			heck in the amount of	• • •		
□ Publication Fee		•	ment by credit card. I			
☐ Advance Order - # of C	opies	— □ The Deposi	Commissioner is her it Account Number _	eby authorized	l by charge the required fee(s), or(enclose an extra copy of this	credit any overpayment, to form).
Commissioner for Patents is	requested to apply the Is	sue Fee and Publication F	ee (if any) or to re-ap	ply any previ	ously paid issue fee to the applica	tion identified above.
(Authorized Signature)		(Date)				
NOTE; The Issue Fee and other than the applicant; interest as shown by the re	d Publication Fee (if rec a registered attorney or cords of the United State	quired) will not be accept agent; or the assignee o s Patent and Trademark O	ted from anyone or other party in ffice.			

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.upto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/287,406	04/06/1999	HIROYUKI SHINBATA	HIROYUKI SHINBATA 1232-4532		
7590 06/30/2003			EXAMINER		
MORGAN & FINNEGAN			CHOOBIN, BARRY		
345 PARK AVENUE NEW YORK, NY 10154			ART UNIT	PAPER NUMBER	
			2625		
			DATE MAILED: 06/30/2003		

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/287,406	.87,406 04/06/1999 HIROYUKI SHINB.		1232-4532	6272	
7590 06/30/2003			EXAMINER		
MORGAN & FIN			CHOOBIN, BARRY		
NEW YORK, NY	- -		ART UNIT	PAPER NUMBER	
			2625 DATE MAILED: 06/30/2003	M	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003: Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	- · · · · · · · · · · · · · · · · · · ·					
	Application No.	Applicant(s)				
Notice of Allowability	09/287,406	SHINBATA, HIROYUKI				
Notice of Allowability	Examiner	Art Unit				
	Barry Choobin	2625				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.						
 This communication is responsive to <u>June 11, 2003</u>. The allowed claim(s) is/are <u>1-9,23,24,26,27,32,33,35,37-39and 41 (now renumbered as 1-20)</u>. The drawings filed on are accepted by the Examiner. 						
 3. ☐ The drawings filed on are accepted by the Examine 4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the: 						
 Certified copies of the priority documents have 	been received.					
Certified copies of the priority documents have	been received in Application No	· ·				
Copies of the certified copies of the priority do	cuments have been received in this	national stage application from the				
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:						
5. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. § 119(e) (to a provisi	ional application).				
(a) The translation of the foreign language provisional a	pplication has been received.					
6. Acknowledgment is made of a claim for domestic priority ur	nder 35 U.S.C. §§ 120 and/or 121.					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE						
7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas						
8. CORRECTED DRAWINGS must be submitted.						
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review (PTO	-948) attached				
1) hereto or 2) to Paper No	,	,				
(b) ⊠ including changes required by the proposed drawing of Examiner.	correction filed <u>12 December 2002</u> ,	which has been approved by the				
(c) including changes required by the attached Examiner	s Amendment / Comment or in the 0	Office action of Paper No				
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.						
9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s)						
1☐ Notice of References Cited (PTO-892)	2☐ Notice of Informa	al Patent Application (PTO-152)				
3 Notice of Draftperson's Patent Drawing Review (PTO-948)	4☐ Interview Summa	ary (PTO-413), Paper No				
5⊠ Information Disclosure Statements (PTO-1449), Paper No. 4. 6□ Examiner's Amendment/Comment						
7☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	8⊠ Examiner's State 9⊡ Other	ement of Reasons for Allowance				
	·					

Application/Control Number: 09/287,406

Art Unit: 2625

DETAILED ACTION

Drawings

1. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on December 12, 2002 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Response to Arguments

2. Applicant's arguments and remarks in view of amendments see paper 16, filed June 13, 2003, with respect to claims 1, 9, 23 – 24, 26 – 27 have been fully considered and are persuasive. The final office action of March 11, 2003 has been withdrawn.

Allowable Subject Matter

Claims 1 – 9, 23 – 24, 26 – 27, 32 – 33, 35, 37 – 39 and 41 are allowed. (Renumbered as claims 1 – 20).

3. The following is an examiner's statement of reasons for allowance: prior art fails to teach or fairly suggest an image processing method comprising; an evaluation step, which calculates a value representing an irradiation end, the representative value is calculated from first differential values; a step of judging an edge point of an irradiation area from the value calculated in the evaluation step as recited in independent claims 1, 23 and 26.

Application/Control Number: 09/287,406

Art Unit: 2625

Although Takeo discloses that the presence or absence of a limited irradiation field is judged by comparing a representative value of an image signal, which corresponds to an overall or part of peripheral portion, with a representative value of the image signal corresponding to the overall area or approximately a center portion. However, Takeo fails to judge whether an irradiation end is present in the overall or part of peripheral portion. Moreover, Takeo fails to judge the location of the irradiation end in the image.

As to independent claims 9, 24 and 27, prior art fails to teach or fairly suggest an image processing method including an evaluation step, which calculates an evaluation value for evaluating positional relations among coordinates of edge point candidates; a judging step of judging whether photographing is performed by an imaging device having an irradiation diaphragm function in a state of irradiation diaphragm or in a state of no irradiation diaphragm, base on the evaluation value calculated in said evaluating step.

Although, Takeo discloses that candidates for a contour of an irradiation field are obtained, and that the contour of the irradiation field is obtained from among the obtained candidates. Takeo detects the contour of the irradiation field from the photographed image having a previously diaphragmed irradiation area. However, Takeo fails to disclose a judging step of judging whether photographing is performed by an imaging device having an irradiation diaphragm function in a state of irradiation diaphragm or in a state of no irradiation diaphragm, base on the evaluation value calculated in said evaluating step as recited in independent claims 9, 24 and 27.

Application/Control Number: 09/287,406

Art Unit: 2625

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Barry Choobin whose telephone number is 703-306-

5787. The examiner can normally be reached on M-F 7:30 AM to 18:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone numbers

for the organization where this application or proceeding is assigned are 703-872-9314

for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

Barry Choobin June 26, 2003

BHAVESH M. MEHTA SUPERVISORY PATENT EXAMINER Page 4

TECHNOLOGY CENTER 2600